What is claimed is:

1. A chemical mechanical polishing (CMP) apparatus comprising:

a rotary turntable having a porous polishing pad surface of the rotary turntable;

an air inlet tube, installed in the rotary turntable and connected to the porous polishing pad, for emitting air through the porous polishing pad; and

an air pump, connected to the air inlet tube, for supplying air into the air inlet tube.

2. A chemical mechanical polishing (CMP) method of planarizing a pattern of a wafer by rotating the wafer that is fixed to a carrier head, on a polishing pad by pressing the wafer against the polishing pad and injecting slurry onto the polishing pad, the method comprising:

performing a first planarization process by injecting the slurry onto the polishing pad and rotating the wafer as the wafer contacts the polishing pad; and

performing a second planarization process during which the wafer is spaced apart from the polishing pad at a given spacing, wherein air is injected into the polishing pad to produce bubbles in the slurry on the polishing pad while the wafer is rotated.

3. A chemical mechanical polishing method as defined by claim 2, wherein in the second planarization process, a concentration of the slurry on the polishing pad is higher than that of the slurry used in the first planarization process.

4. A chemical mechanical polishing method as defined by claim 2, wherein the spacing between the wafer and the polishing pad is 5 to 10 mm.

5. A chemical mechanical polishing method as defined by claim 3, wherein the concentration of the slurry used in the second planarization process is 2 to 3 times higher than that of the slurry used in the first planarization process.

6. A chemical mechanical polishing method as defined by claim 2, wherein a pattern thickness of the wafer polished through the first planarization process is 70 to 80% of a total planarization thickness.